"Management of Occupational Road Risk" – a presentation by Roger Bibbings, Occupational Safety Advisor, RoSPA.

Roger started by saying that road safety had improved significantly over the past twenty years, with a 39% reduction in deaths and nearly 45% fewer serious injuries. There were no reliable figures for work-related casualties, however, but it was estimated that there were probably 800 fatalities, based on statistics showing that 16% business related car miles were driven each year. This compared badly with a figure of 350 RIDDOR deaths.

An HSE Labour Force Survey estimated that there were probably about 77,000 injuries to employees, covering all levels of severity. The probability of an Occupational-related fatality has been calculated as 1 in 8,000 (for an annual mileage of 25,000), which is worse than the rate for the Construction Industry, but better than coal mining, or deep-sea fishing!

From this it is possible to deduce a series of probabilities and annual figures for other types of injury and/or incident, so that we can construct an Accident/Incident Triangle similar to the famous Bird triangle for Occupational Safety and Health
THE ‘TRIANGLE’
THE ROAD INJURY/ACCIDENT/INCIDENT TRIANGLE
(AVERAGE INTERVAL 200 DRIVERS - 25,000 MPY)

<table>
<thead>
<tr>
<th>Time</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 yrs</td>
<td>1</td>
</tr>
<tr>
<td>25 yrs</td>
<td>2</td>
</tr>
<tr>
<td>2 yrs</td>
<td>20</td>
</tr>
<tr>
<td>6 mths</td>
<td>80</td>
</tr>
<tr>
<td>3 mths</td>
<td>160</td>
</tr>
<tr>
<td>8 days</td>
<td>1,800 (?)</td>
</tr>
<tr>
<td>1 per hour</td>
<td>350,000 (?)</td>
</tr>
</tbody>
</table>

- CAR DRIVER FATALITIES
- CAR DRIVER/PASSenger FATALITIES
- SERIOUS INJURIES TO CAR DRIVERS & PASSENGERS
- ALL OTHER CAR RELATED INJURY
- CAR DRIVERS AND PASSENGERS SLIGHTLY INJURED
- DAMAGE ONLY CONFLICTS
- POTENTIAL CONFLICTS
The key issues about the existing approach to MORR are that twice as many people are killed on the roads in work-related accidents than in the ‘workplace’. It is acknowledged that UK accidents are less for drivers and passengers than in the rest of Europe, although our child accident statistics are poor.

In asking ourselves how further improvements may be achieved we can look at what a lot of companies are doing at the moment like raising awareness, making provisions in safety policies, collecting/analysing data, careful vehicle selection, monitoring use of alcohol/drugs, using awards/incentives. Most importantly, they need to look at driver assessment/improvement! It is a sad fact that 80% of drivers do not receive specific training for the vehicles they drive at work!

The best firms “work the Problem” by adopting a risk management approach and putting in place suitable policies, people and procedures.

There are two sets of law, which are relevant to this activity, namely: -
• HASAWA and the Management of Health and safety at Work Regulations, enforced by the HSE, AND
• The road Traffic Act, plus the Highway Code and the Construction and Use Regulations, enforced by the police who are mainly concerned with driver behaviour.

Historically, the HSE has been kept on the sidelines, because of a government letter from Michael Foot, many years ago. Now there is strong justification for using the classical HSE approach advocated in “Successful Health and Safety Management: -

1. Define Policy
2. Organise
3. Plan&Implement
4. Measure
5. Review

The Decision Making process supporting this approach should be based on a systematic risk assessment programme. This will help both managers and drivers to understand: -
• Whether existing controls are adequate and whether more are needed?
• Which risks to tackle first?

A simplified approach to risk assessment is: -

A The Journey
1. Overall distance?
2. Road Type?
3. Adequate/Inadequate time/
4. Adequate/Inadequate breaks?
5. Traffic density?
6. Pedestrian density?
7. Night or Day?
8. Weather conditions?

**B The Vehicle**

1. ‘Fit for purpose’?
2. High/Low performance?
3. Adequate maintenance?
4. Crash resistance?
5. Additional safety features?
6. Driver Ergonomics?
7. In-car distractions?

**C The Driver**

1. Age?
2. Experience?
3. Attitude?
4. Stress?
5. Fatigue?
6. Health/Fitness?
7. Accident/Enforcement history?

8. **Driving Competence?**

Roger commented that fatigue tended to be a far more critical factor than alcohol in accidents, particularly after a full working day, which may be physically demanding. Driver ‘Attitude’ was also a problem, with 18 – 24 year-old males posing a special risk, and it could be in conflict with the 'attitude' requirements of the job. Pareto analysis of accident profiles indicates that 80% of accidents may be caused by 20% of the staff! Another critical factor was the low back pain experienced by drivers of company cars!

In applying the normal hierarchy of risk control measures, certain actions are crucial: -

1. Eliminate the need for a journey or change its mode, say, from road to railway.
2. Reduce mileages.
3. Select the safest routes (may be longer!)
4. Set safe schedules, take account of weather and traffic peaks hours.
5. Select and maintain safe vehicles.
6. **Assess drivers and improve their competence.**

It has to be accepted, Roger added, that mobility is **not an infinite resource!**
The various Risk Control Measures need to be supported by standards for:
- Speed
- Maximum driving hours
- Night/Adverse weather conditions
- Vehicle design/maintenance
- Driver fitness
- Driver competence
- Drugs/alcohol
- Mobile phones, etc.,

The application of this risk management system has to be viewed on a Cost/Benefit basis:

<table>
<thead>
<tr>
<th>COSTS</th>
<th>BENFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management time</td>
<td>Reduced accident losses</td>
</tr>
<tr>
<td>Management training</td>
<td>Less staff time lost</td>
</tr>
<tr>
<td>Risk assessment</td>
<td>Better staff morale</td>
</tr>
<tr>
<td>Driver retraining</td>
<td>Improved public image</td>
</tr>
<tr>
<td>Accident/Incident investigation</td>
<td>Lower insurance premiums</td>
</tr>
<tr>
<td>Data collection</td>
<td>Improved 'off-job' Safety</td>
</tr>
<tr>
<td>Control measures</td>
<td></td>
</tr>
</tbody>
</table>

Experience has shown that the RoSPA defensive driving system is overwhelmingly 'cost-positive' and Roger quoted one major UK plc where the accidents reduced from 23.3 per million kms in 1990/91 to just 5.77 per million kms in 1993/94!

RoSPA has long enjoyed a well-earned reputation for its championing of road safety issues and this latest initiative has been fired up by a wide ranging, national campaign. It started with a discussion document and 'focus' seminars in '97 and '98, followed by written guidance in '98. Also in '98 there was the landmark Stoke Court seminar and declaration, accompanied by intense media coverage and a new training course. This effort was partnered by many road show presentations to police and local authorities and conferences, culminating in a 'strategic appraisal' in 1999.

Roger went on to emphasise the importance of collecting sufficient, relevant data about a firm's transport operation to support any MORR initiative. The watchword is: -

Data, Data, Data....
Roger forecast that future developments could include Benchmarking, changes in Environmental policy, action by Insurers/Brokers, Workforce involvement through Safety Representatives, a possible rise in common law claims, Media pressure and HSE Guidance/Enforcement.

An increasingly influential body, Roger stated, is the HSE/DETR supported Work Related Road Safety Task Group (WRRSTG), which had aimed to produce a Discussion Document by February 2001. The salient points to note about the WRRSTG were: -

- It aimed to initiate national debate
- It was to advise ministers
- The senior chairman is Richard Dykes, Royal Mail
- It has an HSE secretariat
- Membership includes TUC, CBI, RoSPA, Local Authorities, Road Safety bodies, et al.
- It has three Task Groups

Roger concluded by saying that these issues would be pushed forward at an even more intense pace by the wide ranging consortium of 'key players' involved, drawn from: -

- **Policy** (HSE, DETR, HO)
- **Enforcement** (Police, HSE Vehicle Inspectorate)
- **Companies**
- **Trades Unions**
- **Road Safety** ALBRSO, LARSOA
- **Insurers/Brokers**
- **Trade Bodies**
- **Local Authorities**
- **Fleet Sector**
- **Fleet Media**
- **Driver Training bodies**
- **Safety bodies**
- **Universities**
- **Agencies** (DSA, TRL, DVLA)
- **Professional Bodies**
- **Lobbyists**
- **Others**

Members' Questions
As he asked for questions, the chairman, **Harry Jakeman**, made the very important point that road design was crucial to this issue because "five-into-three would just not go!"

**Mark Hoare** asked, in view of his comments, what was the balance to be struck between risk of using private vehicles and public transport. Roger replied that he would look to the HSE for advice but added that RoSPA says that the proposed document would say that in snow and ice the use of a road vehicle would have to be justified by risk assessment. He went on to say that Courier Services would have to base their service on realistic schedules and distances so that there was a reasonable balance between risk and efficient control.

**David Hughes** sought to draw a comparison between HGV driver competence and Fork Lift Truck training, where drivers were retested. Roger said that there was provision for HGV drivers to be re-tested after a conviction and added that risk assessment could be used to determine training needs, such as refresher/retesting periods. Roger then suggested that compliance with the Operator's Licence should be a part of the Health and Safety policy. He went on to talk about the potential for fitting tachographs to cars as well as goods vehicles and the ability to obtain data downloads from Datatrak systems and engine management systems. It is also useful, he said, to monitor fuel and tyre usage and to measure driver perception of hazards. It is important to be positive at all times and to build road safety into the overall safety culture!

**Ray Hesson** made the comment that 75% of learner accidents occurred within 9 months of passing their test. Roger agreed and added that company vehicle drivers were twice as likely to have the worst accidents. He also added that novice drivers needed more help – maybe the use of logbooks to record their experience. He said that peer group pressure was a significant factor – especially with more than two people in the car.

**Peter Evans of CGNU** asked about company responsibilities and the stance of regulations versus codes of practice. Roger said that he agreed that more 'law' tended to be counterproductive and that an individual must be made responsible for focussing on organisational policies and procedures.

**David Callaby** asked about measurement of performance for the Initial Status Review and added that Tachos were not used well enough. Roger agreed that it was difficult and cited a case in one firm where information was stored in different databases. He went on to say that senior management used recent accidents as a window to extrapolate data. He also recommended talking to drivers in a structured way about their experiences – it was better than reading a book. Setting up assessment teams from different levels in a firms was an excellent way of generating useful information.
As there were no more questions, the chairman closed the meeting and members showed their appreciation for Roger's presentation in the normal manner.